



2010 Health and Food Technology

Intermediate 2

Finalised Marking Instructions

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**2010 Health and Food Technology
Intermediate 2**

Question 1

(a) Explain the term “balanced diet”.

Core skills: Recall and use of knowledge

Mark allocation: 1 mark

1 mark for correct explanation.

1. A diet which contains the correct amount of nutrients.
2. A diet which contains all the nutrients in the correct amounts.
3. A diet which contains the correct amount of nutrients for health.

(b) For each of the following nutrients state **one** function and **one** food source.

Fat

Calcium

Vitamin A

Core skills: Recall and use of knowledge

Mark allocation: 6 marks

3 x 1 mark for correct function.

3 x 1 mark for correct food source.

Fat

Functions

1. (Concentrated) source of energy.
2. Provides warmth.
3. Forms insulating layer (under the skin).
4. Provides essential fatty acids (eg omega 3).
5. Source of fat soluble vitamins (A/D/E/K).
6. Needed for structure of body cells.
7. Forms protective layer round essential organs.

Food sources

1. Butter/margarine.
2. Lard.
3. Milk.
4. Cheese.
5. Cream.
6. Meat/meat products.
7. Oily fish.
8. Olive/sunflower/vegetable/sesame/maize/groundnut oil.
9. Nuts.
10. Avocado pears.
11. Pastry.
12. Fried foods/chips/crisps.

Calcium

Functions

1. Formation/maintenance of strong bones and teeth.
2. Required for clotting of blood.
3. Required for nerve/muscle function.

Food sources

1. Milk.
2. Cheese.
3. Yoghurt.
4. Flour.
5. Bread.
6. Green vegetables.
7. Fish where bones are eaten/canned fish.
8. Soya beans.

Vitamin A

Functions

1. Helps vision in dim light/prevents night blindness.
2. Makes visual purple (in the retina of the eye).
3. Helps prevent infection.
4. Keeps the linings of the nose/digestive tract/throat moist.
5. Normal growth in children.

Food sources

1. Milk.
2. Cheese.
3. Yoghurt.
4. Butter.
5. Margarine.
6. Egg (yolk).
7. Oily fish.
8. Liver.
9. Kidney.
10. Red meat.
11. Carrots/tomatoes/red vegetables.
12. Green vegetables.
13. Apricots.

(c) Explain the inter-relationship between Vitamin C and Iron.

Core skills: Recall and use of knowledge

Mark allocation: 1 mark

1 mark for correct explanation.

1. Vitamin C aids absorption of iron.
2. Vitamin C changes iron into its ferrous state to allow it to be absorbed by the body.

Question 1 (continued)

(d) A 51 year old office worker who is overweight and has high blood pressure wishes to improve his diet.
Taking account of The Dietary Reference Values (DRVs) for males aged 50+, evaluate the suitability of his day's meals.

Core skills: Evaluate

Mark allocation: 4 marks

4 x 1 mark for correct evaluation linked to the needs of the case study.

Energy – 13.20MJ

1. Not suitable as this is more energy than he needs and any extra could be converted to fat making him more overweight.
2. Not suitable as this is more energy than he needs and any extra could be converted to fat so further increase his blood pressure.
3. Not suitable as this is more energy than he needs and any extra could be converted to fat so increase his risk of CHD/stroke.
4. Not suitable as he has a sedentary occupation and is unlikely to burn off the excess.

Protein – 55.0g

1. May be suitable as he will get enough protein for repair and maintenance of body tissues.
2. May not be suitable as there is likely to be extra protein which could be converted to energy which may contribute to his weight problem.

Vitamin B – 1.6mg

1. Suitable as there is enough for the release of energy (from food) to allow him to work.

Iron – 6.8mg

1. Not suitable as this is less than he needs so he will/may feel tired at work.
2. Not suitable as this is less than he needs so he may feel tired/he may feel less likely to exercise.
3. Not suitable as this is less than he needs so he will be more likely to suffer from anaemia.

Sodium – 2.1g

1. Not suitable as this is high so further increasing his blood pressure.
2. Not suitable as this is high and will increase his risk of a stroke/CHD

Fibre – 12g

1. Not suitable as this is low and he may feel hungry and may snack on high fat/sugar foods further increasing his weight.
2. Not suitable as this is low and may increase his risk of CHD/constipation/bowel disease.

Question 2

- (a) A manufacturer wishes to extend his range of healthy eating products to include “ready to steam” meals. The target market are consumers who:
- are health conscious
 - enjoy food that is aesthetically pleasing
 - have little time for food preparation
 - want value for money.
- Study the information about “ready to steam” meals below and choose the **most suitable** meal for the manufacturer to develop.

Core skills: Drawing the conclusions	Mark allocation: 4 marks
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1 mark for correct choice.

3 x 1 mark for reasons linked to the needs of the case study.

Correct Choice: A

Main ingredients

1. Chicken/mushrooms/brown rice which will appeal to the target group who are health conscious.
2. Chicken which is low in fat so will contribute to the dietary target group to reduce fat intake and appeal to the target group who are health conscious.
3. Mushrooms which will contribute to the dietary target to increase intake of fruit and vegetables and appeal to the target group who are health conscious.
4. Rice which will contribute to the dietary target to increase TCC and appeal to the target group who are health conscious.

Aesthetic appeal – 4 stars/excellent/best

1. 4 stars/excellent/best rating so will appeal to the target group who enjoy food which is aesthetically pleasing.
2. 4 stars/excellent/best rating so will encourage consumers to buy/make repeat purchases.
3. 4 stars/excellent/best rating which is what is required by the manufacturer.

Storage – Keep refrigerated for up to 5 days/Suitable for freezing/May be cooked from frozen

1. Can be stored for up to five days so will appeal to the target group who have little time for food preparation as they may need to shop less frequently.
2. Suitable for freezing so the target group can use it as required so saving time as they have little time for food preparation.
3. Can be cooked from frozen so saving the target group time as they have little time for food preparation.
4. Suitable for freezing so will save waste if the target group does not use it within 5 days so will appeal as they want value for money.

Preparation – Remove outer packing. Pierce film. Place in steamer for 15 minutes (25 minutes if frozen). Stir contents. Serve.

1. Quick/easy to prepare/cook which will appeal to the target group who have little time for food preparation.
2. Little/no skill required so will appeal to the target group who have little time for food preparation.
3. Shortest cooking time/one of the shortest cooking times even when frozen, so will appeal to the target group who have little time for food preparation.

Cost – ££/fairly inexpensive/one of the cheapest

1. ££/fairly inexpensive/one of the cheapest so will be suitable for the target market who want value for money.
2. ££/fairly inexpensive/one of the cheapest so the manufacturer may sell more (and increase profits).

Question 2 (continued)

(b) Explain the importance to the consumer of **four** of the pieces of information found on the following food label.

Core skills: Recall & use of knowledge

Mark allocation: 4 marks

4 x 1 mark for correct explanation of information linked to the consumer.

Product name

1. Important so the consumer knows what is being bought/is not misled.
2. Important as consumer may identify/have expectations with a particular brand.

Ingredients list

1. So the consumer can identify all the ingredients in the product.
2. Allows the consumer to avoid any ingredients they may wish to avoid/are allergic to.
3. May give the consumer an indication of value for money.
4. May help the consumer to ascertain the nutritional content/value of the product.
5. May help the consumer choose a low fat/sugar/salt product.

Storage instructions

1. Allows the consumer to keep the product at its best before eating.
2. Allows the consumer to minimise bacterial growth/risk of food poisoning if the product is stored properly.
3. The product can be kept in the best condition for a longer time/until the use by/best before date so saving the consumer waste.

(Average) weight of product

1. Allows the consumer to compare prices/look for value for money.
2. Allows the consumer to calculate the number of portions in a product.
3. Allows the consumer to calculate how much to buy.

Use by

1. Allows the consumer to calculate the shelf life of the food.
2. Lets the consumer know the shelf life of the food before it becomes unsafe to eat.
3. So the consumer knows the date by which the food must be eaten if it is not to cause food poisoning.

Cooking instructions

1. Allows the consumer to cook the product so it is safe to eat/minimise the risk of food poisoning.
2. So the consumer can work out if they have the skills/equipment/facilities/time to make the product successfully.
3. Allow the consumer to cook the product successfully and so gain maximum enjoyment.

Question 2 (continued)

- (c) Explain the importance of **each** of the following stages in product development.
Concept generation
First production run

Core skills: Recall & use of knowledge

Mark allocation: 2 marks

- 1 mark for explanation linked to concept generation.
1 mark for explanation linked to first production run.

Concept generation

1. Developing/brainstorming ideas for a new product.
2. Helps to establish a gap in the market.
3. Helps to develop ideas from market analysis.
4. It is the first stage in the development process for a new product.
5. Stage where all/new ideas are considered.

First production run

1. Manufacturer can see how popular the product is likely to be.
2. The manufacturer can withdraw/adapt an unsuccessful product (if sales are not good).
3. Manufacturer can avoid spending more money on an unsuccessful product.
4. The manufacturer can use sales figures to draw up a marketing plan.
5. Manufacturer can test the production line.

- (d) State **two** reasons why a manufacturer would carry out market research when developing a new product.

Core skills: Recall and use of knowledge

Mark allocation: 2 marks

- 2 x 1 mark for reasons linked to the manufacturer.

1. To identify a gap in the market/consumer needs.
2. As a result of previous market research.
3. In response to consumer complaints/suggestions.
4. To counteract falling sales.
5. To match a competitor's product.
6. To take advantage of technological innovations.
7. To take advantage of new trends.
8. To increase market share.

Question 3

(a) Give **one** advantage and **one** disadvantage to the consumer of buying organic produce.

Core skills: Recall and use of knowledge

Mark allocation: 2 marks

1 mark for advantage linked to the consumer.

1 mark for disadvantage linked to the consumer.

Advantages

1. Produced without chemicals so may be less harmful to health.
2. May be fewer side effects/allergies.
3. Some people think organic food tastes better.
4. Causes less harm to the environment so appeals to consumer's ethical beliefs.

Disadvantages

1. Organic produce may be more expensive.
2. Organic products may not have as long a shelf life.
3. Organic products may be less uniform in size/shape/may not look as attractive.
4. Some organic foods may not be chemical free.
5. Evidence of health benefits are not proven.

(b) A young couple who both work full time wish to buy a weekly organic fruit and vegetable box. They like to entertain regularly.

Evaluate the suitability of **one** of the boxes for the couple.

Core skills: Evaluation

Mark allocation: 4 marks

4 x 1 mark for points of evaluation linked to the needs of the case study

Organic Fruit and Vegetable Box A

Potatoes, onions, apples and a mixture of seasonal fruits and vegetables

1. Suitable as there is a selection of basic fruit/vegetables (potatoes, onions, apples) which will help them plan their meals.
2. Suitable as they get a mixture of items so may like the idea of planning meals round them.
3. Suitable as they enjoy trying new items.
4. May be less suitable as the couple may not like the idea of not knowing what they will get.
5. May be less suitable as the couple may not like some of the items sent.
6. May be less suitable as they might not know how to prepare some of the items.
7. May be less suitable as they may wish to buy specific items which are not in the box.

£5 delivery charge

1. May be suitable as they are both working and might consider the cost acceptable.
2. May be suitable as they feel the cost is worth the time saved shopping.
3. May be suitable as they save the cost of fuel needed to go shopping.
4. May be less suitable as this will increase the cost of their shopping.

Delivery Monday to Friday 9am – 5pm

1. May be suitable as although they both work full time, one of them may be at home to take the delivery.
2. May not be suitable as neither of them may be at home to take the delivery as they both work full time.

Recipe sheet included

1. Suitable as this may give them ideas for preparation/cooking the items.
2. May be suitable if they receive an item they do not know how to cook.

Question 3(b) continued

Soil association organic standard

1. Good as it gives the couple a guarantee that it meets the soil association guidelines for producing organic foods.
2. May be less suitable as foods which have this guarantee may be more expensive.

Small or large box available

1. Good as the small box may be the right size for the couple.
2. Good as they could buy a large box when they are entertaining.
3. May be less suitable as the small box may still be too big and some may be wasted.

£2.00 deposit on box, refundable against future order when returned to the driver

1. Good as this will save the couple having to pay for a box each time.
2. Good as this will make the cost of the box cheaper for the couple in the long term.
3. Good as this is environmentally friendly which may appeal to the couple.
4. May be less suitable as the couple will have to pay extra in the first instance.

Organic Fruit and Vegetable Box B

Random selection of fruits and vegetables which will vary weekly

1. Suitable as the couple may enjoy planning meals round the contents of the box.
2. Suitable as they may enjoy trying new items.
3. May be less suitable as the couple may not like the idea of not knowing what they will get.
4. May be less suitable as the couple may not like some of the items sent.
5. May be less suitable as they might not know how to prepare some of the items.
6. May be less suitable as they may wish to buy specific/basic items which are not in the box.

Free delivery

1. Suitable as this will not increase the cost of their shopping.
2. Suitable as this will save the couple the cost of fuel needed to go shopping.

Delivery Monday to Saturday 9.00am – 6.00pm

1. May be suitable as although they both work full time, one of them may be at home to take the delivery.
2. May be suitable as although they both work full time, they may be more likely to be home on Saturday.
3. May not be suitable as neither of them may be at home to take the delivery as they both work full time.

All produce grown within a 20 mile radius

1. Good as it gives the couple a guarantee that all items are grown locally/supports local farmers.
2. Good as it saves food miles which might appeal to the couple.
3. Good as the couple will know the environment the items are grown in which may appeal to them.

Can also order organic meat

1. Good as this may also appeal to the couple.
2. Good as this will save the couple time going to the butchers as they both work.
3. Good as the couple save time by getting both delivered at the same time.
4. Good as it is environmentally friendly which may appeal to the couple.
5. Good as this may allow the couple to plan their meals in advance.

Can order on-line

1. Good as they both work full time and they can order at a time convenient to them.
2. May be less suitable as they cannot view the food before it is delivered/paid for.

Question 3(b) continued

Two person box

1. Suitable as this will be the right size for the couple/prevent waste.
2. May be suitable when they entertain as they can order an extra box.
3. May be less suitable as there may not be enough as the couple entertain regularly.
4. May be less suitable when they entertain as they may not use all of the second box/causing waste.

Cardboard box

1. May be suitable as it can be recycled which may appeal to the couple.
2. May be less suitable as this will increase the cost of the food.
3. May be less suitable as the couple will have to dispose of the box.

(c) The couple wish to buy a dishwasher.

They

- live in a flat
- are environmentally friendly
- entertain often.

Study the information about dishwashers below and choose the **most suitable** dishwasher for the couple to buy.

Core skills: Drawing conclusions

Mark allocation: 4 marks

1 mark for correct choice.

3 x 1 mark for reasons linked to the needs of the case study.

Correct Choice: B

7 programmes

1. Has a wide range of programmes so will have enough to suit the couples different needs.

Energy rating A/best

1. Energy rating A/best will be more/most efficient and the couple wish the dishwasher to be environmentally friendly.
2. Energy rating A/best means this is the most environmentally friendly dishwasher which is what the couple want.

8 place settings

1. Will be able to wash a lot of dishes at once so saving energy which will suit the couple who wish to be environmentally friendly.
2. Will have enough space which will be suitable when the couple entertain.

Cold fill

1. This will use less fuel to heat the water and this will suit the couple who wish to be environmentally friendly.

30 minute economy wash facility

1. This will use less fuel/detergent so will be environmentally friendly which is what the couple want.
2. This will reduce the couples' fuel bill saving them money/energy.
3. Quick wash facility will let the couple have clean dishes to use when necessary.

Noise level – low

1. The noise level is low so will not disturb the couple when relaxing/sleeping/entertaining.
2. The low noise level would be good as the couple wish to be environmentally friendly.
3. The noise level is low so will not disturb neighbours as they live in a flat.

Delay start – up to 7 hours

1. As the machine has a delay start the couple can delay the start of the wash till they go to work/bed.
2. The couple can delay starting the dishwasher until the cheaper electricity tariff is available.

‘No dry’ option

1. The dishes will air dry saving fuel which will appeal to the environmentally friendly couple.
2. The dishes can be dried by hand/air so will be more environmentally friendly.

(d) Name **one** Act that would protect the consumer when buying a dishwasher.
Explain **one** point of the Act.

Core skills: Recall and use of knowledge	Mark allocation: 2 marks
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1 mark for correct identification of Act.

1 mark for correct explanation.

Sale and Supply of Goods Act (1994)

1. There is a contract between the buyer and the seller.
2. Goods must be ‘of satisfactory quality’.
3. Goods must ‘fit the description given’.
4. Goods must be ‘fit for the purpose’ as made known to the seller.
5. Consumers have a reasonable period of time to accept the goods or reject them.

Trade Description Act (1968)

1. It is a criminal offence to falsely describe goods.
2. It is a criminal offence to mislead consumers about services.

Consumer Protection Act (1987)

1. Traders who supply goods must make sure they are safe.
2. Traders are not allowed to mislead customers about the true price of goods.
3. All prices charged to private customers must include Value Added Tax (VAT).
4. Act applies to traders selling new or second hand goods.
5. Act does not apply to goods sold at jumble sales/bring-and-buy sales/private sales.

Sale and Supply of Goods to Consumer Regulation (2002)

1. There is a contract of sale between the buyer and the seller.
2. Goods must be ‘of satisfactory quality’.
3. Goods must ‘fit the description given’.
4. Goods must be ‘fit for their purpose’ as made known to the buyer.
5. Consumers have a legal right to a replacement, partial or full refund or compensation (if a fault appears within 5 years).
6. Consumers must prove goods were faulty at the time of purchase.
7. If complaint is within 6 months, the onus is on the retailer to prove the goods were not faulty.
8. If the complaint is after 6 months, the onus is on the consumer to prove the goods were faulty.

Question 4

(a) A mother who shops weekly wishes to buy a snack bar to put in her child's packed lunch box. Study the information about snack bars and choose the **most suitable** snack bar for the mother to buy.

Core skills: Drawing conclusions

Mark allocation: 4 marks

1 mark for correct choice.

3 x 1 mark for reasons linked to the needs of the case study.

Correct Choice: B

Range of flavours – 3 stars/very good

1. 3 stars/very good so the child will be able to find one they like.
2. 3 stars/very good so the child can have a choice/will not get bored with having the same flavour.

Contains nuts – no

1. Good as the child may be allergic to them.
2. Good so the child will not choke on them.
3. Good as the child's school may not permit nuts/nut products.

Ease of opening – 3 stars/very good

1. 3 stars/very good so the child will be able to open the packet themselves.
2. 3 stars/very good as there may not be an adult present to help the child at lunchtime.

Pack size – 6 bars

1. Good as the mother shops weekly so there will be enough bars for the week.
2. Good as it contains an extra bar for the weekend/a snack after school.

Aesthetic appeal – 4 stars/excellent/best

1. 4 stars/excellent/best so it will appeal to the child.
2. 4 stars/excellent/best so the child will be more likely to eat it.
3. 4 stars/excellent/best so the mother will be reassured that the child will eat their lunch.

Cost – ££/fairly inexpensive/one of the cheapest

1. ££/fairly inexpensive/one of the cheapest good as the mother may not have a lot of money to spend.
2. ££/fairly inexpensive/one of the cheapest good as this represents good value for money which may be important to the mother.
3. ££/fairly inexpensive/one of the cheapest good as if the child does not like the bar/one of the flavours, there will be less waste of money.

Question 4 (continued)

- (b) (i) Give **three** advantages of packaging foods.
(ii) Give **one** disadvantage of packaging foods.

Core skills: Recall and use of knowledge

Mark allocation: 4 marks

3 x 1 mark for advantages.

1 mark for disadvantage.

Advantages

1. To protect food from damage/keep it in good condition (during transport/storage).
2. To keep food in a hygienic condition/protect the food from bacteria.
3. To prevent/show up tampering of the food.
4. To extend shelf life of the food/keep the food fresh/in good condition.
5. So the food is presented in a convenient size/weight.
6. So the food is easily recognised.
7. To allow the food to be advertised.
8. To allow the food to be presented/displayed attractively (to attract the consumer).
9. To provide legal/useful information about the food.

Disadvantages

1. Can add to the cost of the food.
2. Some packaging is not environmentally friendly.
3. Can take up more storage space.
4. Can sometimes give the consumer a false impression of the contents.

- (c) Identify **two** conditions necessary for the growth of bacteria.

Core skills: Recall and use of knowledge

Mark allocation: 2 marks

2 x 1 mark for identification of correct conditions.

1. Temperature/warmth.
2. Moisture.
3. Time.
4. Food.
5. Oxygen.
6. pH level.

Question 4 (continued)

- (d) Answer either part (i) or part (ii)
- (i) State **two** reasons why an Environmental Health Officer would inspect food premises.
 - (ii) State **two** reasons why a Trading Standards Officer would inspect food premises.

Core skills: Recall and use of knowledge	Mark allocation: 2 marks
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2 x 1 mark for correct reason for **either** (i) **or** (ii).

Environmental Health Officer

1. To carry out a routine check.
2. To investigate a complaint from the public.
3. To enforce the Food Safety Act (1990).
4. To inspect food to see if it is safe/take away suspect food to be tested.
5. To carry out a risk assessment.
6. To give advice.

Trading Standards Officer

1. To carry out a routine check.
2. To investigate a complaint from the public.
3. To ensure that all foods are not harmful.
4. To ensure all foods are sold in metric weights/measurements.
5. To ensure weighing/measuring equipment is accurate.
6. To ensure pre-packed foods are correctly weighed/labelled with the weight.
7. To enforce the Weights and Measures Act (1963).
8. To check for counterfeit goods.
9. To enforce the Food Safety Act (1990) in respect of food labelling/ensure food is labelled correctly.
10. To enforce the Trade Descriptions Act (1968).

Question 5

- (a) The manager of a sports centre café wishes to alter their most popular baguette to meet the Scottish Dietary Targets.
Identify **three different** Scottish Dietary Targets, and adapt the baguette recipe to help meet **each** target identified.

Core skills: Recall and use of knowledge | **Mark allocation:** 6 marks

3 x 1 mark for correctly identified Scottish Dietary Targets.

3 x 1 mark for correct adaptation linked to target.

Dietary target – fat

1. Reduce intake of fat.
2. Reduce total intake of fat.
3. Intake of total fat to be reduced to no more than 35% of food energy.
4. Reduce intake of saturated fat.
5. Average intake of saturated fat to be reduced to no more than 11% of food energy.

Adaptation

1. Replace streaky bacon with back bacon/loin/middle/lean bacon.
2. Grill/microwave the bacon instead of frying.
3. Replace mayonnaise with low/reduced fat mayonnaise.
4. Replace cheddar cheese with low/half fat cheddar/edam/gouda.

Dietary target – salt

1. Reduce intake of salt.
2. Reduce intake of salt (from 163mmol/day) to 100mmol/day/to (no more than) 6g/day.

Adaptation

1. Reduce/omit salt.
2. Replace salt with LoSalt.
3. Replace salt with pepper/herbs.

Dietary target – fruit and vegetable

1. Increase intake of fruit and vegetables.
2. Increase intake of fruit and vegetables to 5 portions per day.
3. Intake of fruit and vegetables to double.
4. Increase intake of fruit and vegetables to 400g per day.

Adaptation

1. Increase amount of onion.
2. Add additional fruit/vegetable eg tomato/pineapple.

Dietary target – bread

1. Increase intake of bread (mainly wholemeal).
2. Increase intake of bread by 45%.

Adaptation

1. Use a larger baguette.
2. Replace white baguette with wholemeal.

Dietary target – total complex carbohydrate

1. Increase intake of TCC/fruit and vegetables/bread/breakfast cereals/rice/pasta/potatoes.
2. Increase intake of TCC foods by 25%.

Adaptation

1. Use a larger baguette.
2. Replace white baguette with wholemeal.
3. Add additional fruit/vegetables eg tomato/pineapple.

Dietary target – fish

1. Increase intake of fish, especially oily fish.
2. Intake of white fish to be maintained.
3. Intake of oily fish to double (from 44g/week to 88g per week).

Adaptation

1. Replace bacon with oily fish eg salmon/tuna.

- (b) The manager of the sports centre also wishes to increase the range of fruit juice drinks on sale in the vending machine.
Study the information about fruit juice drinks and choose the **most suitable** drink to be included in the vending machine.
Give **three** reasons for your choice.

Core skills: Drawing conclusions

Mark allocation: 4 marks

1 mark for correct choice.

3 x 1 marks for reasons linked to the needs of the case study.

Correct Choice: C

Main ingredients – 55% fruit juice, water, sugar

1. Contains 55%/greatest amount of fruit juice so will appeal to the target group (who may be health conscious).
2. Contains sugar which is a natural sweetener so will appeal to the target group (who may be health conscious).
3. Does not contain sweeteners which may appeal to the target group (who may wish to avoid (artificial) additives).

Additives – no

1. No additives so may appeal to the target group (who may be health conscious).

Cost – ££/fairly inexpensive

1. ££/fairly inexpensive so the target group will get value for money.
2. ££/not the cheapest but is the healthiest available so the target group may be willing to pay this.

Container – plastic bottle with sports cap

1. Good as it is made of plastic so will not cause injury if dropped in the locker room.
2. Good as the plastic will not smash during the vending process.
3. Good as plastic will be light to be carried during exercise.
4. Good as the sports cap will make it easier to drink from during exercise.
5. Good as the sports cap will help avoid spills in the locker room/gym.
6. Good as the cap will be able to be resealed if the target groups does not drink it all at once, (saving waste).
7. Good as the plastic bottle will be recyclable so this may appeal to the target group.

Variety of flavours – 4 stars/excellent/best

1. 4 stars/excellent/best so most of the target group will find a flavour they like.
2. 4 stars/excellent/best so target group will have a choice and may be more likely to buy often.

Carbonated – no

1. Good as the target group will be less likely to become unwell/feel sick during exercise.

(c) Explain a **different** way in which a manufacturer may improve the **nutritional** quality of **each** of the following foods.

- Bread
- Tinned fish

Core skills: Recall and use of knowledge

Mark allocation: 2 marks

2 x 1 mark for correct nutritional improvement.

Bread

1. Fortify with/add vitamin B.
2. Fortify with/add folic acid.
3. Fortify with/add vitamin E.
4. Fortify with/add calcium.
5. Fortify with/add iron.
6. Add seeds.
7. Add nuts.
8. Add fruit/vegetables.
9. Include wholemeal/wholegrain flour.

Tinned fish

1. Replace oil with/can in brine.
2. Replace oil with/can in spring water.
3. Fortify with/add omega 3.
4. Fortify with/add omega 6.

**Intermediate 2 Level Home Economics
Analysis of Question Paper for the Year 2010**

Context:

✓

Health and Food Technology

Lifestyle and Consumer Technology

Fashion and Textile Technology

Analysis of question content and question choice

Question	Content outline	Choice element		Mark
		Yes	No	
1. (a)	Explain term balanced diet.		✓	1
(b)	One function and source of fat, calcium, vitamin A.		✓	6
(c)	Inter relationship between vitamin C and iron.		✓	1
(d)	Evaluation of day's meals for office worker.		✓	4
2. (a)	Choice of 'ready-to-steam' meals.		✓	4
(b)	Information on food label.	✓		4
(c)	Explanation of 2 stages in product development.		✓	2
(d)	Reasons for market research.		✓	2
3. (a)	Advantage and disadvantage of organic produce.		✓	2
(b)	Evaluation of organic food box.	✓		4
(c)	Choice of dishwasher.		✓	4
(d)	A consumer Act linked to dishwasher.		✓	2
4. (a)	Choice of snack bar for child's packed lunch box.		✓	4
(b)	Advantages and disadvantages of packaging food.		✓	4
(c)	2 conditions for bacterial growth.		✓	2
(d)	Reasons why EHO or Trading Standards officer would visit food premises.	✓		2
5. (a)	Adapt a baguette to meet the Scottish Dietary Targets.		✓	6
(b)	Choice of fruit drink for sports centre vending machine.		✓	4
(c)	Improving nutritional quality of bread, tinned fish.		✓	2

Intermediate 2 Level Home Economics Analysis of Question Paper for the Year 2010						Context	✓	Health and Food Technology Lifestyle and Consumer Technology Fashion and Textile Technology	
Question 1									
Component Unit						Skill Assessment			
Question	Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall & Use of Knowledge	Draw Conclusions	Evaluate	Totals	
1 (a)	1				1				
(b)	6				6				
(c)	1				1				
(d)	4						4		
Totals	12			0	8		4	12	

Intermediate 2 Level Home Economics Analysis of Question Paper for the Year 2010 Context						✓	Health and Food Technology Lifestyle and Consumer Technology Fashion and Textile Technology	
Question 1								
Component Unit						Skill Assessment		
Question	Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall and use of knowledge	Draw conclusions	Evaluate	Totals
1 (a)	1				1			12
(b)	6			0	6			
(c)	1				1			
(d)	4						4	
2 (a)		4				4		12
(b)			4	4	4			
(c)		2			2			
(d)		2			2			
3 (a)			2		2			12
(b)			4	4			4	
(c)			4			4		
(d)			2		2			
4 (a)			4			4		12
(b)		4			4			
(c)	2				2			
(d)			2	2	2			
5 (a)	6				6			12
(b)		4				4		
(c)		2			2			
Totals	20	18	22	10	36	16	8	60
Target Range	15-25 marks	15-25 marks	15-25 marks	10-12 marks	30-37 marks	15-20 marks	8-10 marks	60 marks

[END OF MARKING INSTRUCTIONS]